



Receipt

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Kristine B. Fuimaono, et al.
Application No. : 09/692,494
Filed : October 19, 2000
Title : IRRIGATION PROBE FOR ABLATION
DURING OPEN HEART SURGERY

Grp./Div. : 3762
Examiner : Not Yet Assigned

Docket No. : 39716/KMO/W112

TC 3700 MAIL ROOM

SEP 20 2001

RECEIVED

Assistant Commissioner for Patents
Office of Initial Patent Examination's
Customer Service Center
Washington, D.C. 20231

P.O. Box 7068
Pasadena, CA 91109-7068
June 8, 2001

Commissioner:

When proofing the Filing Receipt for the above-identified application, we located the following error:

Please correct the Continuing Data as claimed by Applicant to read as follows:

-- THIS APPLICATION IS A CIP OF 09/370,601 08/10/1999 --

Please forward a Corrected Filing Receipt to the undersigned.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By

Kathleen M. Olster
Reg. No. 42,052
(626) 795-9900

I HEREBY CERTIFY THAT THIS CORRESPONDENCE
IS BEING DEPOSITED WITH THE U.S. POSTAL
SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE
ADDRESSED TO: ASSISTANT COMMISSIONER FOR
PATENT, WASHINGTON, D.C. 20231 ON
6/8/01 Kathleen M. Olster
DATE SIGNATURE

KMO/nml

Enclosure: Copy of Filing Receipt
Copy of Application transmittal letter
Copy of first page of application

NML PAS356059.1*-6/8/01 8:42 AM



RECEIVED

Page 1 of 4

APR 20 2001

Christie, Parker & Hale, LLP

(1) KMO
(2) DAD

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/692,494	10/19/2000	3762	1568	39716/KMO/W112	7	56	4

CONFIRMATION NO. 6739

UPDATED FILING RECEIPT

Christie Parker & Hale LLP
PO Box 7068
Pasadena, CA 91109-7068W112:
39716
CASE # 39716 ACTION _____
REMINDER _____ DUE DATE _____
DEADLINE _____

OC000000005973265

Date Mailed: 04/16/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Kristine B. Fuimaono, Covina, CA;
Irma Hill, Laverne, CA;

Domestic Priority data as claimed by applicant

THIS APPLICATION IS A CON OF 09/370,601 08/10/1999

CIP

Foreign Applications

If Required, Foreign Filing License Granted 12/28/2000

Projected Publication Date: N/A

Non-Publication Request: No

Early Publication Request: No

Title

Irrigation probe for ablation during open heart surgery

Preliminary Class

604

RECEIVED
SEP 20 2001
TC 3700 MAIL ROOM

Data entry by : BROWN, ROSCOE

Team : OIPE

Date: 04/16/2001





**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 36 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15 (b).

PLEASE NOTE the following information about the Filing Receipt:

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 600 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:

TO: SEP 2001
MAIL ROOM
RECEIVED
U.S. PATENT AND TRADEMARK OFFICE
JUN 13 2001

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, DC 20231



UTILITY PATENT APPLICATION TRANSMITTAL
(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No. : 39716/KMO/W112
Inventor(s) : Kristine B. Fuimaono and Irma Hill
Title : IRRIGATION PROBE FOR ABLATION
DURING OPEN HEART SURGERY
Express Mail Label No. : EL387001535US

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, D.C. 20231

Date: October 19, 2000

1. **FEE TRANSMITTAL FORM** (*Submit an original, and a duplicate for fee processing*).

2. **IF A CONTINUING APPLICATION**

This application is a Continuation-in-Part of patent application No. 09/370,601.

Prior application information: Examiner Not Yet Assigned; Group Art Unit: 3762

 This application claims priority pursuant to 35 U.S.C. §119(e) and 37 CFR §1.78(a)(4),
to provisional Application No. .

3. **APPLICATION COMPRISED OF**

Specification

24 Specification, claims and Abstract (total pages)

Drawings

7 Sheets of drawing(s) (FIGS. 1 to 8)

Declaration and Power of Attorney

- Newly executed
 Unexecuted declaration
 Copy from a prior application (37 CFR 1.63(d))(for continuation and divisional)

4. **Microfiche Computer Program (Appendix)**

5. **Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)**

- Computer Readable Copy
 Paper Copy (identical to computer copy)
 Statement verifying identity of above copies

6. **ALSO ENCLOSED ARE**

- Preliminary Amendment
 A Petition for Extension of Time for the parent application and the required fee are
enclosed as separate papers
 Small Entity Statement(s)
 Statement filed in parent application, status still proper and desired

RECEIVED
SEP 20 2001
TC 3700 MAIL ROOM

UTILITY PATENT APPLICATION TRANSMITTAL
(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.: 39716/KMO/W112

- Copy of Statement filed in provisional application, status still proper and desired
 An Assignment of the invention with the Recordation Cover Sheet and the recordation fee are enclosed as separate papers
 This application is owned by pursuant to an Assignment recorded at Reel
, Frame
- Information Disclosure Statement (IDS)/PTO-1449
 Copies of IDS Citations
 Certified copy of Priority Document(s) (*if foreign priority is claimed*)
 English Translation Document (*if applicable*)
 Return Receipt Postcard (MPEP 503) (should be specifically itemized).
 Other

7. CORRESPONDENCE ADDRESS

CHRISTIE, PARKER & HALE, LLP, P.O. BOX 7068, PASADENA, CA 91109-7068
CUSTOMER NUMBER: 23363

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By



Kathleen M. Olster
Reg. No. 42,052
626/795-9900

KMO/nml



RECEIVED

SEP 20 2001

TC 3700 MAIL ROOM

FEE TRANSMITTAL UTILITY PATENT APPLICATION

DATE: October 19, 2000

Docket No. : 39716/KMO/W112

Inventor(s) : Kristine B. Fuimaono and Irma Hill

Title : IRRIGATION PROBE FOR ABLATION DURING OPEN HEART SURGERY

FEE DETERMINATION

CLAIMS AS FILED					
	NUMBER FILED	NUMBER EXTRA	SMALL ENTITY RATE	LARGE ENTITY RATE	FEE
TOTAL CLAIMS	56 - 20	36	x \$9.00	36 x \$18.00	\$648.00
INDEPENDENT CLAIMS	4 - 3	1	x \$40.00	1 x \$80.00	\$80.00
MULTIPLE-DEPENDENT CLAIMS FEE			\$135.00	\$270.00	-0-
BASIC FEE			\$355.00	\$710.00	\$710.00
				TOTAL FILING FEE	\$1,438.00

List Independent Claims: 1, 7, 34 and 42

METHOD OF PAYMENT Payment Enclosed: Check for \$1,438.00 The Commissioner is hereby authorized to charge any fees under 37 CFR 1.16 and 1.17 which may be required during the entire pendency of the application to Deposit Account No. 03-1728. Please show our docket number with any charge or credit to our Deposit Account. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By


Kathleen M. Olster
Reg. No. 42,052
626/795-9900

KMO/nml



9716/KMO/W112

RECEIVED
SEP 20 2001
TC 3700 MAIL ROOM

IRRIGATION PROBE FOR ABLATION DURING OPEN HEART SURGERY

CROSS-REFERENCE TO RELATED APPLICATION

5 This application is a continuation-in-part of U.S. Application No. 09/370,601, filed August 10, 1999, the disclosure of which is incorporated herein by reference.

FIELD OF THE INVENTION

10 The present invention is directed to an irrigation ablation probe for use during open heart surgery.

BACKGROUND OF THE INVENTION

Atrial fibrillation is a common sustained cardiac arrhythmia and a major cause of stroke. This condition is perpetuated by reentrant wavelets propagating in an abnormal atrial-tissue substrate. Various approaches have been developed to interrupt wavelets, including surgical or catheter-mediated atriotomy. It is believed that to treat atrial fibrillation by radio-frequency ablation using a catheter, continuous linear lesions must be formed to segment the heart tissue. By segmenting the heart tissue, no electrical activity can be transmitted from one segment to another. Preferably, the segments are made too small to be able to sustain the fibrillatory process.

20 It has been found that over 60% of patients with mitral valve problems also have atrial fibrillation. Moreover, patients undergoing open heart surgery commonly develop atrial fibrillation during the surgery, and thus it would be useful to address this problem during the surgery. Accordingly, under certain circumstances it may be desirable to treat atrial fibrillation during open heart surgery, for example, when a patient is undergoing a mitral valve replacement or repair procedure. Accordingly, a need exists for devices and methods for treating atrial fibrillation during open heart surgery.